

10/711,845

**IN THE CLAIMS:**

What is claimed is:

1. (Original) An antifuse structure comprising:  
a fin having a center portion and end portions,  
wherein said center portion of said fin comprises a substantially non-conductive region adapted to permanently become a conductor when heated above a predetermined temperature, wherein said end portions comprise conductors.
2. (Original) The antifuse in claim 1, wherein said center portion of said fin comprises an amorphous material.
3. (Original) The antifuse in claim 1, wherein said center portion of said fin is approximately 10 times more conductive after being heated above said predetermined temperature when compared to a conductivity level of said center portion before heating.
4. (Original) The antifuse in claim 1, wherein said center portion comprises less than approximately 10 percent of the length of said fin.
5. (Original) The antifuse in claim 1, wherein said center portion comprises amorphous silicon before being heated above said predetermined temperature and comprises polycrystalline silicon after being heated above said predetermined temperature.
6. (Previously Presented) The antifuse in claim 1, wherein said end portions comprise silicide regions of said fin.
7. (Original) The antifuse in claim 1, wherein said fin has a height and length that exceeds

10/711,845

more than 2 times a width of said fin.

8-26. (Cancelled).

27. (Previously Presented) An antifuse structure comprising:  
a fin having a center portion and end portions, wherein said fin has a height and length that exceeds a width of said fin,  
wherein said center portion of said fin comprises a substantially non-conductive region adapted to permanently become a conductor when heated above a predetermined temperature, and  
wherein said end portions comprise conductors.
28. (Previously Presented) The antifuse in claim 27, wherein said center portion of said fin comprises an amorphous material.
29. (Previously Presented) The antifuse in claim 27, wherein said center portion of said fin is approximately 10 times more conductive after being heated above said predetermined temperature when compared to a conductivity level of said center portion before heating.
30. (Previously Presented) The antifuse in claim 27, wherein said center portion comprises less than approximately 10 percent of the length of said fin.
31. (Previously Presented) The antifuse in claim 27, wherein said center portion comprises amorphous silicon before being heated above said predetermined temperature and comprises polycrystalline silicon after being heated above said predetermined temperature.
32. (Previously Presented) The antifuse in claim 27, wherein said end portions comprise silicide regions of said fin.

10/711,845

33. (Previously Presented) The antifuse in claim 27, wherein said height and said length of said fin exceed more than 2 times said width of said fin.
34. (Previously Presented) An antifuse structure comprising:  
a fin having a center portion and end portions, wherein said fin has a height and length that exceed more than 2 times a width of said fin,  
wherein said center portion of said fin comprises a substantially non-conductive region adapted to permanently become a conductor when heated above a predetermined temperature, and  
wherein said end portions comprise conductors.
35. (Previously Presented) The antifuse in claim 34, wherein said center portion of said fin comprises an amorphous material.
36. (Previously Presented) The antifuse in claim 34, wherein said center portion of said fin is approximately 10 times more conductive after being heated above said predetermined temperature when compared to a conductivity level of said center portion before heating.
37. (Previously Presented) The antifuse in claim 34, wherein said center portion comprises less than approximately 10 percent of the length of said fin.
38. (Previously Presented) The antifuse in claim 34, wherein said center portion comprises amorphous silicon before being heated above said predetermined temperature and comprises polycrystalline silicon after being heated above said predetermined temperature.
39. (Previously Presented) The antifuse in claim 34, wherein said end portions comprise silicide regions of said fin.